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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,403	07/02/2003	Jim Edward Newton	CA7020002001	4473

55497 7590 03/13/2007  
CADENCE DESIGN SYSTEMS, INC.  
c/o BINGHAM MCCUTCHEN LLP  
THREE EMBARCADERO CENTER  
SAN FRANCISCO, CA 94111-4067

EXAMINER
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KIK, PHALLAKA

ART UNIT	PAPER NUMBER
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2825

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/13/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/613,403

Applicant(s)

NEWTON ET AL.

Examiner

Phallaka Kik

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This Office Action responds to the Application filed on 7/2/2003. Claims 1-15 are pending.

#### *Claim Objections*

2. **Claims 1-15** are objected to because of the following informalities:

As per **claims 1,6,11**, --flattened-- should be inserted before "parameterized" (lines 3, 4, 5, respectively) to provide for the missing essential functional/structural relationship among the elements of the claims.

As per **claim 13**, "the instructions, when executed, cause the system to perform the method of recognizing one or more arrays, the recognizing method" (lines 1-2) should be replaced with --said recognizing one or more arrays-- for greater clarity.

As per **claim 14**, "the instructions, when executed, cause the system to perform the method of selecting common and unique parameters of each element, the selecting method" (lines 1-3) should be replaced with --said selecting common and unique parameters of each element-- for greater clarity.

As per **claim 15**, "the instructions, when executed, cause the system to perform the method of generating the characteristic value, the method" (lines 1-2) should be replaced with --said generating the characteristic value-- for greater clarity.

As per **claims 2-5,7-10,12-15**, the claims are also objected to for incorporating the above errors into the respective claims by claim dependency.

Appropriate correction is required.

***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. **Claims 1-15** are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility, wherein the characteristic value being generated is not being used for anything (i.e., there is no step of designing the circuit using the generated characteristic value); thus providing no practical application or practical application that produces useful, concrete and tangible result (see in *Re. Diehr*, 450 U.S. at 187, 209 USPQ at 8; *AT&T*, 172 F. 3d at 1358-59, 50 USPQ2d at 1452).

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 1-2,4-7,9-12,14-15** are rejected under 35 U.S.C. 102(e) as being anticipated by **McGaughy** (US Patent Application Publication No. 2005/0149312).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

As per **claims 1,6,11**, the flattened hierarchy of the parameterized cell being generated is described in paragraph [0022], the characteristic value (i.e., common index numbers or like generic symbols" being generated based on the common and unique parameters are further summarized in paragraphs [0024]-[0025], wherein the computer system, apparatus, computer readable medium comprising instructions are further described in paragraphs [0064]-[0069].

As per **claims 2,4,7,9,12,14**, **McGaughy** discloses all of the elements of claims 1,6,11, from which the respective claims depend as discussed in the rejections of claims 1,6,11 above, wherein the one or more arrays of shapes being recognized and identified are part of the geometry related recognition and identification as further described in paragraphs [0227]-[0236] (see also paragraphs [0100]-[0107], [0118]).

As per **claims 5,10,15**, **McGaughy** discloses all of the elements of claims 4,9,14, from which the respective claims depend, as discussed in the rejections of claims 4,9,11 above, wherein the steps/means for storing the common and unique parameters in a data structure are part of the tracking method which includes the common index

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numbers being stored in the data structures and updatable naming database (NDB) (see paragraph [0025]).

***Allowable Subject Matter***

7. **Claims 3,8,13** would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action, and if rewritten to overcome the minor informalities objections as set forth above and if rewritten to include all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

As per **claims 3,8,13**, the claims recite the inventive steps/means of determining delta values and determining instances that share the delta values, as claimed, as part of the method/apparatus/computer readable medium for encoding elements of an electronic design, as claimed, which the prior arts made of record failed to teach or suggest. Accordingly, the claimed invention is novel and un-obvious over the prior arts made of record.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Therefore, Applicant is requested herein to consider them carefully in response to this Office Action. In particular, the following prior arts are most relevant:

**Allen et al.** (US Patent No. 6,574,779);

**Hagerman et al.** (US Patent No. 6,530,072);

**Carruthers et al.** (US Patent No. 6,370,677);

**NN8809135** ("Extended Range for Macro Parameters", IBM Technical Disclosure Bulletin, Vol. 31, No. 4, p. 135 (2 pages), September 1988).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phallaka Kik whose telephone number is 571-272-1895. The examiner can normally be reached on Monday-Friday, 8AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on 571-272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**Any response to this action should be mailed to:**

Commissioner for Patents

P. O. Box 1450

Alexandria, VA 22313-1450

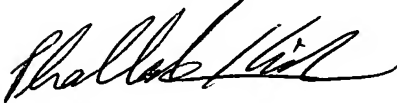
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**or faxed to:**

571-273-8300

A handwritten signature in black ink, appearing to read "Phallaka Kik", written in a cursive style.

Phallaka Kik  
Primary Examiner  
March 10, 2007